

Wet, wet, wet!

Waihi receives a relatively high average rainfall of around 2,200mm a year and unlike many mines around the world which are operated in dry climates, Newmont Waihi Gold operates with an abundance of water.

Much of the water on site is reused and recycled for mine use. Surplus water is treated prior to discharge to the Ohinemuri River under strict conditions on quality and quantity.

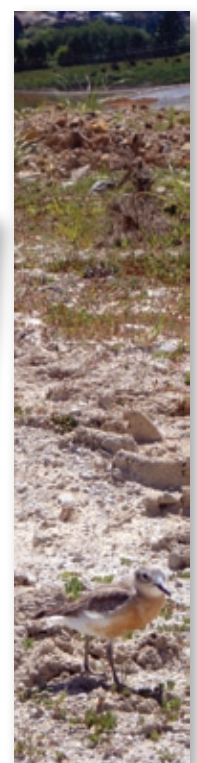
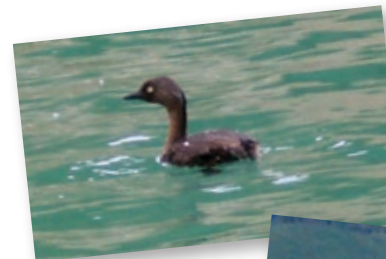
Because of this water surplus, water management is an important part of our operations. The Water Treatment Plant and Reverse Osmosis Plant treat unneeded water prior to discharge to the Ohinemuri River.

There are four sources of water at our site:

- **Mine water** - derived from dewatering the open pit and the underground mine
- **Underdrainage water** - collected from both upward rising groundwater beneath the tailings storage area and drainage from tailings and the rock embankments
- **Stormwater runoff** - stored in collection ponds and silt ponds
- **Decant water** - collected from the surface of the tailings storage area.

Water birds

For many years the tailings storage areas and the rock embankments have been habitats for many bird species including ducks, dabchicks and dotterels.



From tailings storage to wetland

There are two tailings storage areas and rock embankments on Newmont Waihi Gold's mine site. Currently tailings slurry is pumped from the process plant to Tailings Storage 1A.

Tailings Storage 2 was used for this purpose until July 2005.

(The numbering is somewhat confusing - although Storage 1A is currently used to store tailings, it was built and commissioned after Storage 2.)

This photo was taken in June 2010.



As expected, after Storage 2 was decommissioned in 2005, water quality improved to a level capable of supporting aquatic life. Only rainwater now enters Storage 2. Since November 2007 water from Storage 2 has been discharged directly to the Ohinemuri River, with the approval of Environment Waikato. This water is not required to undergo treatment at the water treatment plant. Pumped water discharges from Tailings Storage 2 to the river are continuously monitored for turbidity, conductivity and pH. The water is also periodically tested for a wide range of parameters to ensure that its quality remains suitable for discharge.

Tailings defined

Tailings are a slurry left after the gold and silver have been recovered from ore. Tailings are a mixture of finely ground rock and water and contain cyanide left over after the gold extraction process. The slurry is piped to the tailings storage area. Tailings solids settle there and surface water is decanted and reused at the process plant. Any excess water is treated before specific reuse around the site or before discharge into the Ohinemuri River. Residual cyanide in the storage area is broken down by sunlight, aeration by wind and changing water chemistry. For more information about tailings, water management and more, see www.marthamine.co.nz

Extended hours

From January 10 until February 7 2011 the open pit and conveyor will be operating from 7.00am to 9.00pm weekdays and from 7.00am to midday on Saturdays.

The extended hours from 7.00pm to 9.00pm weekdays are permitted if work is of an urgent nature and necessary for carrying out mining operations. Activity must comply with normal noise level criteria as set out in the Land Use Consent Condition 3.8.

Call us

If you are concerned about any aspect of our activities we ask that you call us. We have a free phone that is attended 24 hours a day, seven days a week.

The number is 0800 NEWMONT or 0800 639 6668.

When you phone this number - no matter what time of the day or night - it will be answered by one of Newmont Waihi Gold's external affairs staff. You will not be asked to hold, or to push any more buttons or to leave a message. You will talk to a real person, not a recorded message (unless the phone is engaged at the time of your call).

People are often surprised when we suggest that they can phone us after hours. The bottom line is this: **we actually do want to know** so we can take action to prevent people becoming irritated by our activities.

For more information about how we deal with your call when you contact us please visit our website www.marthamine.co.nz. Click on the COMMUNITY button on the left on the home page. The first title you will see is "How do I register a complaint or concern about Newmont's operations in Waihi". If you would like us to send you a written copy please phone us with your mailing address.

0800 NEWMONT (0800 639 6668)

Reusing and recycling water

Newmont Waihi Gold has five exploration drill rigs working around the town and in the open pit at the moment. Rigs at Smith and Slevin Streets have been operating twelve hours a day and more recently a rig began working at Clark Street. A further rig has been positioned on the playing field at one of our primary schools since early December 2010, operating 12 hours a day each day except statutory and observed holidays. Drilling there is expected to continue throughout the school holidays and maybe into the first part of Term 1, depending on progress.

Drill rigs can use up to 1,000 litres of water a day. Water is recirculated to cut down the amount of overall use. Four rigs working around town are using water derived from the mine site and one is using a private supply.

Water derived from the mine site to supply rigs come from two sources - mine water and decanted water. **Mine water** is that which is pumped from underground to dewater the Martha open pit and the Favona underground mine. This water source is used within the open pit mine site to spray haul roads to dampen dust. **Decanted water** is drawn off tailings storage areas at the rock embankments. This has various uses including washing mine vehicles before they travel outside the mine site to public roads. Storage 2 is comprised of rainfall and is discharged directly to the Ohinemuri River while water decanted from Storage 1A is treated before further use or discharge.